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(54) A control apparatus and method for reproducing data from a digital video disk at high speed

(57) A control apparatus for reproducing data from a digital video disk at high speed and a method therefor. The control apparatus including a descrambler (240) for descrambling the data which is read from the digital video disk (100), demodulated and error-corrected, and detecting a navigation pack sector from the data, a navigation interrupt generator (260) for generating a navigation interrupt if the navigation pack sector is detected by

the descrambler (240), a memory (330) for storing the descrambled data, and a microprocessor (500) for determining a next reproducing position of the digital video disk (100) on the basis of information of the navigation pack sector contained in the descrambled data by accessing the memory (330) if the navigation interrupt is detected, and controlling a driving of the digital video disk (100).

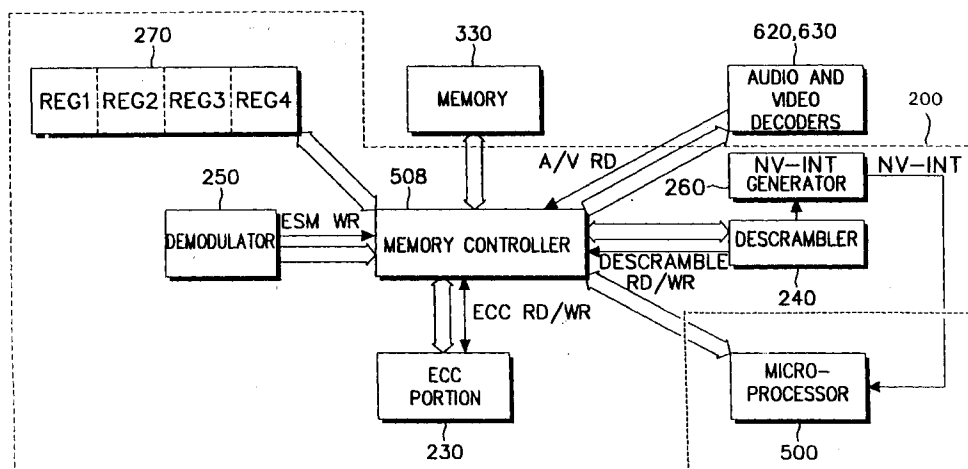


FIG. 2

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EUROPEAN SEARCH REPORT

Application Number
EP 98 30 0071

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.6)
A	EP 0 724 264 A (TOKYO SHIBAURA ELECTRIC CO) 31 July 1996 (1996-07-31) * column 21, line 31 - line 37 * * column 23, line 13 - line 50 * * column 24, line 37 - column 26, line 11 * * column 30, line 18 - line 21 * * column 33, line 26 - column 34, line 19 * * column 36, line 12 - line 20 * * figures 31,32,35A * ---	1-8, 17-20	G11B27/10 H04N5/783 H04N5/926 H04N9/804 H04N5/85 G11B27/30
A	C.FOGG: "DVD Technical Notes - Decoder stages" MPEG.ORG, 'Online! 21 July 1996 (1996-07-21), XP002112431 Retrieved from the Internet: <URL:http://www.mpeg.org/MPEG/DVD/Book_A/D ecoder.html> 'retrieved on 1999-08-17! * the whole document * ---	1,3,5, 19,20	
A	WO 96 29822 A (MATSUSHITA ELECTRIC IND CO LTD) 26 September 1996 (1996-09-26) & EP 0 817 480 A (MATSUSHITA ELECTRIC IND CO LTD) 7 January 1998 (1998-01-07) * page 6, line 17 - line 18 * * page 6, line 50 - line 54 * * page 7, line 1 - line 2 * * page 10, line 36 - line 53 * * page 12, line 50 - line 51 * * page 14, line 25 - line 50 * * figures 2,6,10 * ---	1,3,5,6, 19,20	TECHNICAL FIELDS SEARCHED (Int.Cl.6) G11B H04N
A	EP 0 738 078 A (TOKYO SHIBAURA ELECTRIC CO) 16 October 1996 (1996-10-16) * column 39, line 38 - line 48 * * column 40, line 27 - line 36 * * figures 43,59,60,63,71 * ---	1-11,16, 19,20	
-/--			
The present search report has been drawn up for all claims			
Place of search		Date of completion of the search	Examiner
THE HAGUE		17 August 1999	Ogor, M
CATEGORY OF CITED DOCUMENTS			
X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document		T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document	

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Office

EUROPEAN SEARCH REPORT

Application Number
EP 98 30 0071

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.6)
A	US 5 574 704 A (SHIMOSAKA WATARU) 12 November 1996 (1996-11-12) * column 3, line 8 - line 18 * * column 3, line 62 - line 65 * * column 4, line 8 - line 12 * * column 4, line 18 - line 32 * * column 4, line 42 - line 65 * * figures 1,2 * -----	5,19,20	
			TECHNICAL FIELDS SEARCHED (Int.Cl.6)
The present search report has been drawn up for all claims			
Place of search		Date of completion of the search	Examiner
THE HAGUE		17 August 1999	Ogor, M
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document			

EPO FORM 1503 03/82 (P04/C01)

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ON EUROPEAN PATENT APPLICATION NO.**

EP 98 30 0071

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on
The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

17-08-1999

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
EP 0724264 A	31-07-1996	AT 174149 T	15-12-1998
		CA 2168327 A	31-07-1996
		CN 1134583 A	30-10-1996
		DE 69601039 D	14-01-1999
		DE 69601039 T	24-06-1999
		EP 0872839 A	21-10-1998
		JP 2747268 B	06-05-1998
		JP 8273304 A	18-10-1996
		JP 2857126 B	10-02-1999
		JP 10074379 A	17-03-1998
		JP 2875237 B	31-03-1999
		JP 10074380 A	17-03-1998
		US 5870523 A	09-02-1999
WO 9629822 A	26-09-1996	CN 1181859 A	13-05-1998
		EP 0817480 A	07-01-1998
		US 5838872 A	17-11-1998
EP 0738078 A	16-10-1996	AU 698969 B	12-11-1998
		AU 5287696 A	30-10-1996
		BR 9606320 A	16-09-1997
		CA 2192077 A	17-10-1996
		JP 2856721 B	10-02-1999
		JP 10074377 A	17-03-1998
		JP 8339663 A	24-12-1996
		WO 9632720 A	17-10-1996
		NO 965356 A	10-02-1997
		US 5574704 A	12-11-1996

EPO FORM P/0458

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